

This erratic flowering and fruiting were evident during many miles of travelling around the Merredin district.

On 7th April, 1971, I visited the area first mentioned and examined the patch of Quandong trees. The fruit had set, and very heavily; some of the spikelets had as many as six small green fruits on a spike. Other spikelets carried three, four or five fruits to a spike. The Quandong trees were growing among mature eucalypt trees and scattered scrub on a red, rather gravelly soil at the bottom of a steep incline. Thus they would receive a good flow of water from rain.

A short distance away was another small group of Quandong trees. Over the past few years of observing them I have noted that their fruit yield was not at all heavy. At present there was only a sparse fruiting, about one per cent of that of the first group, the spikelets carrying only one or two fruits. These trees were growing among native pines, thick scrubby growth and some eucalypts, on a slight incline but the soil was not red at the surface. The foliage of the trees did not appear so healthy or so robust as in the first group. These trees may have been older.

A third group of Quandong trees, about four miles from the first group, consisted of about 30 young trees which had fruited heavily in October, 1970, bearing good, clean fruit. On my visit on April 7, 1971, I found that despite the previous year's fruiting, fruit had set again, not so heavily, but still the trees were quite well covered. Also the fruiting seemed normal; there were no blossoms with the fruit as in the previous year. None of the Quandong trees inspected anywhere in this district in April, 1971, carried blossoms with the developing fruit.

I had always understood, and have been told by bushmen, that Quandong trees bear fruit only every other year. The fruiting of the third group of Quandong trees just mentioned, successively in two seasons, may possibly have been the result of heavy flood rains in March (1971) with Cyclone Mavis, Merredin registering 392 points. But this can only be a speculation. The fluctuations in fruiting of the Quandong, in relation to seasonal weather conditions, as Mr. Royce has reminded me, must be a "second-hand" sort of response as the Quandong, being a parasite, is in a way independent of the season except through the host plants.

BIRDS SEEN AT PELICAN POINT, 1966-1968

By R. JOB

From November 26th, 1966 visits were paid at fairly frequent intervals to Pelican Point, Swan River Estuary, Nedlands, up to November 2nd, 1968. In 1957 the Point was visited in January, March, July, September, October and November, and in the following year in February, May, June, July and September onwards.

The following is a check list of species seen. Species found on the landward area immediately adjacent to the Point are included.

Hoary-headed Grebe, *Podiceps poliocephalus*.

1 on the river to the west of the Point July 22nd, 1967.

Australian Pelican, *Pelecanus conspicillatus*

Recorded on most visits. Highest numbers recorded are as follows:— Nov. 26th, 1966 (10); Dec. 6th, 1966 (15); Dec. 7th, 1966 (20); Sept. 23rd, 1967 (9); Oct. 31st, 1967 (13); July 5th, 1968 (12); Oct. 8th, 1968 (11); Oct. 18th (10); Oct. 31st and Nov. 2nd, 1968 (12).

Black Cormorant, *Phalacrocorax carbo*

Some present most months. Not recorded in March or July, 1967 or May and June, 1968. Highest number recorded was 22 on Oct. 18th, 1968, but most usually noted as under half a dozen individuals.

Little Black Cormorant, *Phalacrocorax sulcirostris*

Present throughout the year. Usually found in flocks. Largest flock, estimated at 300, on May 21st, 1968.

- Pied Cormorant, *Phalacrocorax varius*
Throughout the year.
- Little Pied Cormorant, *Phalacrocorax melanoleucus*
Seen in most months but never numerous, never more than half a dozen being recorded on any one occasion.
- Australian Darter, *Anhinga rufa*
1 female or young male in July 1968. Seen once on the Point associating with cormorants (July 2nd), but was usually to be found on the jetties opposite Crawley Beach. Last seen on July 10th.
- White-faced Heron, *Ardea novaehollandiae*
1 beside the 'lagoon' inland from the Point on March 12th, 1967.
- Black Swan, *Cygnus atratus*
4, heading up river, flew over the Point on September 29th, 1967.
- Mountain Duck, *Tadorna tadornoides*
Sept. 23rd, 1967 a pair; Oct. 18th, 31st and Nov. 2nd, 1968 a pair.
- Black Duck, *Anas superciliosa*
July 22nd, 1967, 2 on the river west of the Point. Oct. 18th, 1968, 2 on 'lagoon'; Nov. 2nd, 1968, 2 on river off the Point.
- Grey Teal, *Anas gibberifrons*
Nov. 26th, 1966 (3); Dec. 5th, 1966 (20-30); evening of Dec. 15th, 1966 (79). Not noted since Dec. 20th, 1966.
- Blue-winged Shoveler, *Anas rhynchotis*
1 female at the Point Dec. 15th, 1966.
- Grey Plover, *Pluvialis squatarola*
One of the most characteristic waders of Pelican Point. An injured bird of this species spent the winter months of 1968 on the Point. On Sept. 4th this was joined by four others in near full breeding plumage. Oct. 12th, 1968 (10); Oct. 22nd, 1968 (4).
- Eastern Golden Plover, *Pluvialis dominica*
Dec. 15th, 1966 (1); Jan. 26th, 1967 (2).
- Large Sand-Dotterel, *Charadrius leschenaultii*
1 seen on Oct. 12th, 13th, 18th and 31st, 1967; 1 on Feb. 3rd, 1968; 2 on Feb. 4th, 1968.
- Red-capped Dotterel, *Charadrius alexandrinus*
Recorded throughout the summer months, but never in large numbers. Nested in Nov., 1967. First noted in the summer of 1968 on Oct. 8th (5).
- Whimbrel, *Numenius phaeopus*
1 on Dec. 7th, 1966; 2 on Feb. 15th, 1967.
- Bar-tailed Godwit, *Limosa lapponica*
Regular throughout the summer months. First recorded in 1967 on Oct. 12th (2), and in 1968 on Oct. 8th (1); Nov. 10th (22).
- Common Sandpiper, *Tringa hypoleucos*
1 on Oct. 3rd, 1967.
- Terek Sandpiper, *Xenus cinereus*
Nov. 26th, 1966 (1); Nov. 14th and 15th, 1967 (1); Feb. 3rd and 4th, 1968 (1); Oct. 8th, 1968 (1); Oct. 31st, 1968 (2); Nov. 2nd, 1968 (3).
- Turnstone, *Arenaria interpres*
1 on Oct. 31st, 1967.
- Great Knot, *Calidris tenuirostris*
Seen each year but in small numbers. Jan. 12th, 1967 (2); March 12th, 1967 (6); Oct. 12th, 1967 (2); Nov. 7th, 1967 (7); Oct. 15th, 18th and 22nd 1968 (5).

Knot, *Calidris canutus*

More numerous and a more frequent visitor than the preceding, but never in very large numbers. May 21st, 1968 (10); Oct. 12th, 1968 (8).

Curlew Sandpiper, *Erolia ferruginea*

Next to the Little Stint the most numerous summer wader. First noted in 1967 on Sept. 29th, and in 1968 on Oct. 2nd (2); Oct. 22nd (12).

Little Stint, *Erolia ruficollis*

Most numerous wader. First noted in 1967 on Sept. 29th and in 1968 on Oct. 2nd (estimated at 150); Nov. 2nd, 1968 (estimated 200).

Sharp-tailed Sandpiper, *Erolia acuminata*

Seen every year but in small numbers (under 5 on any one occasion). First noted in 1967 on Oct. 31st (2), and in 1968 on Oct. 22nd (1).

Pectoral Sandpiper, *Erolia melanotos*

1 on Oct. 18th and 19th, 1967. From a distance thought to be a Golden Plover, as yellowish as that species. About Curlew Sandpiper size, but shorter legged and plumper. Legs dull yellow, beak dark and straight. Crown dark, white eyebrow line, back 'sealy' rather than streaked. Upper breast buffish with darker streakings. Breast sharply demarcated from rest of underparts which were dull white. When alarmed the bird stretched its neck and gave the impression of being longer necked than most waders of its size. No wing bar in flight. White under the wing in flight. White edges to a dark tail.

White-headed Stilt, *Himantopus himantopus*

Dec. 5th and 6th, 1966 (2); Dec. 20th (1); Jan. 12th, 1967 (4); Jan. 18th, 1967 (6); Feb. 15th, 1967 (4); Oct. 13th, 1967 (1).

Avocet, *Recurvirostra novaehollandiae*

Seen every year. Dec. 5th and 6th, 1966 (15); Sept. 23rd, 1967 (12); Oct. 31st, 1967 (30); Nov. 14th, 1967 (19); Oct. 8th, 1968 (4); Oct. 12th, 1968 (3).

(Skua—species?). On Nov. 26th, 1966 I noted 'a light phase skua flew overhead and was harried by gulls. Probably an Arctic.' Unfortunately this was my first visit to Pelican Point and I did not give much attention to this bird, not being aware that this was an unusual record.

Silver Gull, *Larus novaehollandiae*

The commonest bird at Pelican Point, and seen on every visit.

Marsh Tern, *Chlidonias hybrida*

1 on Sept. 29th, 1967. Not very much larger than a Fairy Tern. Too small for Common or Arctic Tern. Black bill, wine red legs. Greyish-white forehead, black nape and line through eye. Grey mantle and wings, greyish-white underparts.

Caspian Tern, *Hydroprogne caspia*

Regular in the summer months, and also recorded in May and July, 1968. March 12th, 1967 (12); Feb. 4th 1968 (12); Oct. 8th, 1968 (8); Oct. 12th (11); Oct. 15th (14); Oct. 18th (8); Oct. 23rd (6, two of which were observed mating).

Crested Tern, *Sterna bergii*

Most numerous tern on Pelican Point. Some recorded on every visit.

Fairy Tern, *Sterna nereis*

Not recorded regularly, and usually in smaller numbers than the other regular terns. Feb. 15th and March 12th, 1967 (12); Feb. 3rd, 1968 (20, including immature birds); Oct. 2nd and 15th, 1968 (2); Oct. 22nd, 1968 (4).

Senegal Turtledove, *Streptopelia senegalensis*

Frequent visitor to the landward side.

- White-tailed Black Cockatoo, *Calyptorhynchus baudinii*
 Sept. 26th, 1967, 2 flew across the river heading north.
- Twenty-eight Parrot, *Barnardius zonarius*
 Visits the landward side of the area.
- Laughing Kookaburra, *Dacelo gigas*
 Visits the landward side of the area.
- Sacred Kingfisher, *Halcyon sanctu*
 Sept. 23rd, 1967, 1 on a bush near the Point.
- Bee-eater, *Merops ornatus*
 Oct. 12th, 1968, c.20 hawking over the 'lagoon' area.
- Wedge-tailed Swallow, *Hirundo neoxena*
 Seen frequently over the 'lagoon' and along the shore.
- Tree Martin, *Petrochelidon nigricans*
 Seen over the 'lagoon' but not so frequently as Wedge-tailed Swallow.
- Australian Pipit, *Anthus novaeseelandiae*
 Seen in the summer of 1967. Sept. 29th, 1967, 1 in display flight.
- Black-faced Cuckoo-Shrike, *Coracina novaehollandiae*
 1 on landward side of 'lagoon' Jan. 18th, 1967.
- Little Grass-bird, *Megalurus gramineus*
 Dec. 20th, 1966, 1 heard among reeds fringing 'Lagoon'.
- Blue Wren, *Malurus sp.*
 1 female seen and other birds heard among thick bushes on the landward side of the 'lagoon'.
- Western Warbler, *Gerygone fusca*
 Oct. 18th, 1967, 1 heard among bushes near the Point.
- White-fronted Chat, *Epthianura albifrons*
 Nov. 29th, 1967 a party of six. Oct. 12th, 1968, 2 females.
- Silvereye, *Zosterops gouldi*
 Frequently found in the area behind the Point.
- Singing Honeyeater, *Meliphaga virescens*
 Often seen among bushes and trees behind the Point.

NOTES ON THE FAUNA OF YUNDURUP IN EARLIER DAYS

By BRIAN HUTCHISON. Woodlands

In view of the faunal surveys now being carried out by members of the Western Australian Naturalists' Club, in connection with the establishment of the Club's field station on Culeenup (or Mill) Island (*W. Aust. Nat.*, 11 (7), 1970: 160) it may be of interest to place on record some observations I had previously made on the natural history of the area. In my early youth I spent a considerable time at Yundurup, holidaying with my family. The years covered were between 1940 and 1942. We were camped one mile east of the main store at South Yundurup.

MAMMALS

Brush-tailed Possum (*Trichosurus vulpecula*)—These were seen in an old Flooded Gum (*Eucalyptus rudis*) in front of our cottage.

? Quokka (*Setonix brachyurus*)—I can remember seeing small wallabies on the mainland but at this lapse of time I am unable to confirm the species. They were most likely the Quokka. In his study of the decline of mainland populations of this species S. R. White (*W. Aust. Nat.*, 3 (5), 1952: 101) placed the time of their eclipse during the late 1930's.

BIRDS

The only species I can recall, which are not already on the Club's avifaunal lists, are the Barn Owl (*Tyto alba*) and the Brown Bittern (*Botaurus poiciloptilus*). The owl was seen on Culeenup Island; it seemed